



**STATE OF MONTANA
MONTANA DEPARTMENT OF TRANSPORTATION
JOB PROFILE AND EVALUATION**

SECTION I - Identification

Working Title:

District Construction Engineering Manager

Department:

Transportation

Class Code Number: 119417

Division & Bureau:

District Engineering

Class Code Title:

Engineering Manager

Section & Unit:

Glendive District

Pay Band: 7

Work Address:

503 North River Ave
Glendive, MT 59330

Position Number: 54157028

Phone: 406-345-8200

☐ FLSA Exempt

☒ FLSA Non-Exempt

Profile Completed By:

DCE Panel
Matt Strizich

Work Phone:

406-494-9634

Debby Williams
Human Resources Specialist

406-444-6945

Brian Cameron
CMS, LLC

406-442-4934

Work Unit Mission Statement or Functional Description:

The MDT's mission is to serve the public by providing a transportation system and services that emphasize quality, safety, cost effectiveness, economic vitality and sensitivity to the environment.

The Highways and Engineering Division prepares projects for bidding and coordinates highway construction. The Division is made up of the Materials, Construction, Right-of-Way, Bridge, Traffic and Safety, Environmental Services, Engineering Oversight, and Preconstruction bureaus; the CADD Systems and Engineering Management Support sections; and five District Construction Offices in Missoula, Butte, Great Falls, Glendive, and Billings for budget and workforce purposes. Each District oversees highway and bridge construction from the time a construction contract is awarded to a private contractor until the project is completed and approved. During highway construction projects, District personnel work closely with the contractor, conducting construction surveys, inspecting the work, and monitoring traffic control.

Describe the Job's Overall Purpose:

The District Construction Engineering Manager is responsible for directing and overseeing District Construction program operations and activities throughout all phases of highway construction projects, including responsibility for directing the final review of plans, specifications, and estimates for accuracy and ability to be constructed; determining and resolving technical construction problems within proposed contract plans; and developing solutions to a broad range of engineering deficiencies and contract administration problems. The scope of duties includes program planning and administration; project management and contract administration; District Construction operations management; and performing a variety of other duties as assigned. The incumbent reports to the District Administrator (#57006) and provides direct supervision for 13 professional and technical staff (13.00 FTE).

SECTION II - Major Duties or Responsibilities***% of Time******A. DISTRICT CONSTRUCTION PROGRAM MANAGEMENT******50%***

1. Develops short and long-term plans and program objectives to ensure the District's Construction Program remains current with federal and other national standards and develops cost-effective implementation plans for new technology and approaches in the highway construction field. This involves assessing construction review results and trends, construction processes, materials standards, prefabrication processes, new equipment, environmental requirements, and other influences and developing long-term implementation strategies through coordination with other Districts and MDT Engineering and Maintenance division programs.
2. Develops and oversees construction and contract administration policies, procedures, and specifications that agree with federal requirements. This requires assessment of changes in national standards, construction project trends, industry practices, new materials, equipment and construction processes, and other factors to develop new approaches to policy and program issues. Designs and recommends Quality Control and Quality Assurance specifications for determining contractor incentives by gathering input from contractors and MDT staff and developing parameters that provide a quality product and are reasonably attainable.
3. Implements and monitors strategies for statewide implementation of construction review, contract administration, contract claims management, and related project activities. This involves assessing short and long-range program needs, fiscal limitations, staff training, contractor ability to produce, economic impacts (e.g., on contractors, construction costs, highway efficiency, etc.), and other factors. Coordinates activities among other districts and contractors to ensure all parties are ready and able to implement new specifications.
4. Maintains liaisons with the Federal Highway Administration; other districts and MDT divisions; and state, local, and tribal agencies. This involves exchanging information to gain cooperation, coordinate activities, explain projects, and resolve conflicts by providing engineering advice, interpreting statutes and regulations, developing memoranda of understanding, negotiating the use of staff and other resources, and coordinating and directing cooperative projects.
5. Provides technical consultation and department representation for national uniform highway methods and design specifications development to ensure that the State's interests are represented, establish uniform specifications and design methods, and assess necessary changes to MDT construction programs or specifications.
6. Researches, develops, reviews, and recommends implementation strategies for new technology and advancements related to highway construction and related activities that may affect MDT

operations. This involves assessment of administrative (e.g., contract administration, claims management, etc.), engineering, materials, and economic factors.

7. Represents the District and Department at public meetings, national meetings, media interviews, and with other government or private transportation interests; evaluates information; and explains, promotes, and defends Department positions on construction activities and projects. Serves as liaison between MDT and contractors and materials suppliers to ensure construction specifications, materials, techniques, and procedures are fair, reasonable, and acceptable to all contracting parties. Promotes an environment for open, fair, and honest State-contractor relationships.

B. CONSTRUCTION PROJECT MANAGEMENT

25%

1. Directs the final review of construction plans, specifications, and estimates for accuracy and ability to be constructed. This involves interpretation of plans and specifications, assessing various options to resolve construction problems, and identifying the most cost-effective way to attain project results and compliance with specifications. Develops solutions to a broad range of engineering deficiencies and contract administration problems to facilitate project completion and ensure compliance with federal and State construction and contract requirements. This involves coordination with engineering and design professionals and the theoretical application and testing of engineering concepts to assess the feasibility of various alternatives.
2. Reviews proposed contract plans and special provisions for technical construction problems and coordinates revisions with other MDT bureaus and divisions. Provides assistance to engineering staff on construction projects and recommends changes that should be made on future contract plans to correct difficulties encountered in construction and to improve the quality of finished facilities.
3. Directs the preparation of reports, studies, summaries, research proposals, special reports, instructions, and procedures related to construction projects as directed by the District Administrator to ensure sound judgment and engineering practices are incorporated. Directs and oversees the preparation of program data (e.g., construction trends, change order tracking, detailed drawings, etc.) used to establish standards, specifications, and policies.
4. Oversees and coordinates the environmental review and permitting processes necessary to complete construction projects in compliance with State and federal requirements (e.g., MEPA, Clean Water Act, air pollution control requirements, etc.). This involves monitoring permit application and document preparation (EAs and EISs) processes to ensure they are completed appropriately and on time, coordinating environmental requirements (e.g., erosion control) with contractors, ensuring continuity of permits for the life of projects, and serving as liaison with environmental and other agencies (e.g., DEQ, DNRC, Corps of Engineers, etc.).
5. Reviews and approves change orders, extra work orders, contractor progress payments, final project acceptance, and final contractor payments to ensure contract charges and payments are legitimate, necessary, and properly documented. This involves assessment of original contract agreements, costs to date, available funding, federal requirements, monetary impact of the change, engineering principles, uniformity of contract administration, etc., and ensuring project overruns are adequately explained to the FHWA to maintain federal participation.
6. Evaluates contractor proposals for value-engineering alternatives to identify more cost-effective ways of meeting Department goals. Performs advanced analysis of value-engineering proposals to determine if similar project results (e.g., structural integrity, useful life, maintenance requirements, etc.) can be attained in a more cost-effective manner.

7. Develops solutions to a broad range of engineering deficiencies and contract administration problems to facilitate project completion and ensure compliance with federal and State construction and contract requirements. This involves coordination with engineering and design professionals and the theoretical application and testing of engineering concepts to assess the feasibility of various alternatives. This position is the District's technical authority on project addenda and bases decisions and recommendations on factors such as the significance of the addenda, monetary and legal risks to MDT, cost-effectiveness, and precedent.
8. Provides engineering design advice and technical assistance to other Districts, MDT Engineering and Maintenance personnel, counties, individuals, contractors, and others regarding project design practices; contract administration; claims management; and construction regulations, codes, and criteria.
9. Mediates disputes between contractors and District staff related to contracts, contract claims, and project payments. This involves evaluating disputes, scheduling mediation conferences, presenting the State's case in the form of engineering facts and expert opinions, and negotiating settlements.
10. Directs and coordinates the review of contract claims with MDT legal, engineering, and Construction Bureau staff as necessary. Provides or coordinates expert testimony in court cases involving contractor disputes.

C. DISTRICT CONSTRUCTION OPERATIONS

10%

1. Directs and coordinates administrative details related to District Construction program operations to ensure expenditures are cost-effective and ensure compliance with State and federal requirements. This involves researching design, engineering, materials, and construction practices and standards (e.g., AASHTO and FHWA standards), determining their applicability to District operations, and developing policies and procedures to implement the most efficient technology and practices.
2. Monitors compliance with established operational policies and procedures and achievement of goals through consultation and meetings with subordinate staff and supervisors (e.g., weekly meetings, status reports, etc.), personal review of construction project and contract administration plans, and through discussions with other MDT staff and management. Monitors compliance with established policies in and reviews and approves atypical or developmental methods and procedures.
3. Provides information for the preparation of biennial budgets. This involves forecasting annual contractor payments based on factors such as historical expenses, contractor capability, types of planned projects (e.g., rural vs. urban highway paving projects, utility impacts, etc.), inflation, changes in construction processes and materials, etc. Develops recommendations for allocations for annual fiscal operational plans and recommends spending priorities by reviewing past funding practices, anticipated projects and expenditures, program goals and objectives, and related personnel and other administrative expenses. Monitors program expenditures to ensure the money is allocated as designated and tracks funding levels through review of fiscal reports and approval of expenditures.
4. Determines the need for and oversees the development, negotiation, and monitoring of environmental, engineering, research, and related contracts. This involves directing the development of requests for proposals, reviewing and coordinating vendor service contracts, and monitoring and evaluating work undertaken by contractors on District projects.

5. Determines and fulfills equipment procurement needs of the District Construction Program by developing specifications, ensuring compliance to Department procurement practices, developing EPP budget justifications and submitting requests, and integrating equipment into ongoing operations to ensure maximization of District resources.

D. STAFF MANAGEMENT

15%

1. Directly and indirectly manages professional and technical staff (86.47 total FTE) of the District Construction program by reviewing and revising overall work plans, priorities, and procedures and monitoring progress through meetings and consultations. Conducts staff meetings, disseminates data, and promotes information exchange for support and advancement of District, Division, and Department goals.
2. Establishes and approves overall responsibilities and allocation of positions within the District Construction program. Recommends and justifies requests for additional personnel as necessary.
3. Identifies staffing needs, recruits and hires employees, and allocates personnel to adequately support the ongoing District Construction operations and activities. This involves ensuring compliance with State and federal employment and civil rights laws throughout the hiring process, assigning personnel screening and selection committees, reviewing results and making recommendations for hiring, and ensuring proper training and orientation of new employees.
4. Evaluates the performance of positions directly supervised and completes performance evaluations. Recommends, implements, and monitors corrective actions including discipline and termination. Enforces disciplinary policies to ensure consistency in the application of disciplinary actions.
5. Ensures that subordinate staff complies with State and Department personnel rules, regulations, and policies. Resolves grievances at the lowest level whenever possible.

D. OTHER DUTIES

05%

This position performs a variety of other duties as assigned by the District Administrator in support of the Department mission and District objectives. This includes exchanging information with consultants, agency staff, and the public; providing training, education, and professional and technical assistance; directing special projects; participating in ongoing training and educational programs; and performing a variety of other duties as directed.

2. *Specific examples of problems solved, decisions made, or procedures followed when performing the most frequent duties of this position include:*

The position is responsible for directing the final review of plans, specifications, and estimates for accuracy and ability to be constructed; determining and resolving technical construction problems within proposed contract plans; and developing solutions to a broad range of engineering deficiencies and contract administration problems to facilitate project completion and ensure compliance with federal and State construction and contract requirements. The position also reviews and approves change orders, extra work orders, contractor progress payments, final project acceptance, and final contractor payments to ensure contract charges and payments are legitimate, necessary, and

properly documented; monitors environmental permit application and document preparation (EAs and EISs) processes to ensure they are completed appropriately and on time; and evaluates contractor proposals for value-engineering alternatives to identify more cost-effective ways of meeting Department goals.

3. *The most complicated aspect of this position is:*

The most complex aspects of the position include the assessment of short and long-range District Construction Program objectives, fiscal limitations, staff training, contractor ability to produce, economic impacts (e.g., on contractors, construction costs, highway efficiency, etc.), and other factors to develop strategic plans for program operations and activities. The position is also responsible for assessing construction review results and trends, construction processes, materials standards, prefabrication processes, new equipment, environmental requirements, etc., and developing long-term implementation strategies. Mediation of disputes related to contracts, contract claims, and project payments involves understanding and sensitivity to complex engineering, contract, and project dynamics affecting involved parties and project objectives.

4. *Guidelines, manuals, or written procedures that support this position include:*

Available laws, regulations, guidelines, manuals, and/or procedures include Engineering Division objectives and District goals; State, federal, AASHTO, and FHWA standards; project specifications; Montana Materials Manual, Montana Construction Manual and Standard Specifications for Road and Bridge Design; environmental rules and regulations; and project management documentation.

5. *Which of the duties and/or specific tasks listed under 1. (above) are considered "essential functions" that must be performed by this position (with or without accommodations)? (If you need information or training on the identification of essential functions, please contact MDT Human Resources Division.)*

The following duties are considered essential functions because they require specialized expertise and skill and are the primary reasons the job exists:

Duty A: District Construction Program Management
Duty B: Construction Project Management
Duty C: District Construction Operations
Duty D: Staff Management

The following mental and physical demands are associated with these essential functions:

PHYSICAL

- Light lifting (up to 10 lbs.)
- Ability to walk over uneven terrain or in water
- Extensive travel within the state to project locations (over 1000 miles per month), and out of state travel by airline to national conferences and meetings.
- Operating a personal computer
- Communicate in writing, in person, and over the phone

MENTAL

- Deal with the public on a regular basis
- Ability to multi-task
- Demands for accuracy in all aspects of work

- Ability to meet inflexible deadlines
- Decision making that affects public health and safety
- Computing arithmetic operations
- Comparing data
- Compiling information
- Analyzing
- Coordinating
- Synthesizing
- Negotiating
- Instructing

6. **Does this position supervise others?** ☒ Yes ☐ No

Number directly supervised: 86.37 FTE

Complexity level of the positions supervised: 2,3,4,5,6,7

Position Number(s) of those supervised:

57216 Engineering Manager
 57205 Civil Engineering Specialist
 57039 Civil Engineering Specialist
 91878 Construction Manager
 91978 Construction Manager
 91938 Civil Engineering Technician
 91838 Civil Engineering Technician
 91908 Civil Engineering Technician
 91808 Civil Engineering Specialist
 91818 Civil Engineering Technician
 91828 Civil Engineering Technician
 91848 Civil Engineering Technician
 91858 Civil Engineering Specialist
 91868 Civil Engineering Specialist
 91888 Civil Engineering Technician
 91928 Civil Engineering Specialist
 91988 Civil Engineering Technician
 95733 Civil Engineering Aide
 95735 Civil Engineering Technician
 95833 Civil Engineering Aide

7. **This position is responsible for:**

☒ Hiring ☐ Firing ☒ Supervision ☐ Pay Level
☒ Performance Management ☐ Promotions ☒ Discipline
☐ Other:

8. **Attach an Organizational Chart.**

ATTACHED

SECTION III - Minimum Qualifications - List minimum requirements for the first day of work.

Critical knowledge and skills required for this position:

KNOWLEDGE:

This position requires knowledge of the concepts and theories of civil engineering, mathematics, the physical sciences, and public administration. The position requires a comprehensive knowledge of program management; applied research methods and techniques; contract administration principles; contract law and claims management; pre-stressed concrete; methods and practices of bridge or structure construction and construction engineering; engineering policy; materials properties, specifications, and test methods; and construction safety practices. The position also requires knowledge of highway economic, safety, and efficiency issues; project planning; State, federal, AASHTO, and FHWA standards; project specifications; the Montana Materials Manual, Montana Construction Manual and Standard Specifications for Road and Bridge Design; highway construction methods and techniques; transportation planning and design; field applications of highway engineering and construction; environmental rules and regulations; project management and documentation; and construction methods and practices. Supervisory responsibilities require knowledge of employment law, program requirements, and personnel management practices and techniques.

SKILLS:

This position requires advanced skills in planning and directing engineering activities; budgeting; applying analysis and judgment in arriving at solutions to difficult engineering and contract problems; communicating effectively verbally and in writing; exercising professional judgment to arrive at timely decisions in complex situations; establishing and maintaining effective working relationships; applying analysis and judgment in arriving at solutions and make appropriate choices among options and alternatives; and to motivate and direct staff to meet Department goals.

Behaviors required to perform these duties?

- **Leadership:** Provides clear directions, technical assistance, and guidance to District and staff to ensure effective operations and project activities. Motivates staff to achieve common objectives. Appropriately delegates responsibilities to competent staff.
- **Analytical/Interpretive Thinking:** Accurately applies general engineering standards, project requirements, and contract stipulations to specific construction issues.
- **Decision Making:** Evaluates multiple and ambiguous factors to resolve problems. Develops technically and legally defensible courses of action in response to project deficiencies, contract disputes, and related problems.
- **Communication:** Translates technical information to audiences of varied technical levels; communicates effectively with multiple staff, contractors, and cooperators verbally and in writing.
- **Independence of Action:** Determines appropriate responses to construction engineering and problems and deficiencies with minimal assistance or precedent. Serves as the District's technical authority in construction management and contract administration issues.

Education:

Check the one box indicating minimum education requirements for this position for a new employee the first day of work:

- | | |
|---|--|
| <input type="checkbox"/> No education required | <input type="checkbox"/> Related AAS/2-years college/vocational training |
| <input type="checkbox"/> High school diploma or equivalent | <input checked="" type="checkbox"/> Related Bachelor's Degree |
| <input type="checkbox"/> 1-year related college/voc. training | <input type="checkbox"/> Related Master's degree |

Please specify the acceptable and related fields of study:

Required/Acceptable: Civil Engineering

Related: Engineering discipline that qualifies for registration as a Professional Engineer.

Other education, training, certification, or licensing required (specify): Registration as a Professional Engineer (PE) in Montana is required; however, if an applicant within the Department is considered to possess the appropriate alternative qualifications for the position and is not a registered engineer, senior management may make an exception.

Experience:

Check the one box indicating minimum work-related experience requirements for this position for a new employee the first day of work:

- | | |
|---|---|
| <input type="checkbox"/> No prior experience required | <input type="checkbox"/> 3 to 4 years |
| <input type="checkbox"/> 1 to 2 years | <input checked="" type="checkbox"/> 5 or more years |

Other specific experience (optional): At least two (2) years of supervisory and/or construction project management experience is required. Experience in highway construction is preferred.

Alternative Qualifications:

This agency will accept alternative methods of obtaining necessary qualifications.

☒ Yes ☐ No

Alternative qualifications include: NONE SPECIFIED

SECTION IV – Other Important Job Information

NONE SPECIFIED

SECTION V – Signatures

Signature indicates this statement is accurate and complete.

Employee:

Name: Danny L. Hood

Title: District Construction Engineer

Signature: _____

Date: _____

Immediate Supervisor:

Name: Ray E. Mengel

Title: District Administrator

Signature: _____

Date: _____

Division/District Administrator:

Name: _____

Title: _____

Signature: _____

Date: _____

Department Designee:

Name: Jean Bond

Title: Chief, Employee Relations Bureau

Signature: _____

Date: _____

Recruitment Review: My signature below attests to my review of and determination that the minimum qualifications (education and experience) listed in this profile meet the established recruitment standards of MDT.

Name: _____

Title: Human Resource Specialist (Helena/District)

Signature: _____

Date: _____



**STATE OF MONTANA
MONTANA DEPARTMENT OF TRANSPORTATION
JOB EVALUATION**

This section is to be completed by a trained classifier in or contracted by the Human Resource Division or by the State Personnel Division.

Prepared By: Communication & Mgmt Services

Date: 12/09/04 _____

Position Status: X Reclassified

☐ Vacant

☐ New Position

☐ Career Ladder

Choice of Class Series: Engineering Manager series is most appropriate based on the predominant work assigned, and overall role within the organization.

Engineering Manager, 119417

Position Summary: The District Construction Engineering Manager is responsible for directing and overseeing District Construction program operations and activities throughout all phases of highway construction projects, including responsibility for directing the final review of plans, specifications, and estimates for accuracy and ability to be constructed; determining and resolving technical construction problems within proposed contract plans; and developing solutions to a broad range of engineering deficiencies and contract administration problems. The scope of duties includes program planning and administration; project management and contract administration; District Construction operations management; and performing a variety of other duties as assigned. The incumbent reports to the District Administrator (#57006) and provides direct supervision for 13 professional and technical staff (13.0 FTE).

Classification Factor Level: 7

The predominant work of this position consists of: District Construction Program Management (50%) which involves developing short and long-term plans and program objectives; assessing construction review results, trends and a broad range of other variables; developing and overseeing construction and contract administration policies, procedures and specifications; implementing and monitoring strategies for statewide implementation of construction review, contract administration, contract claims management, and related project activities; resolving conflicts and monitoring liaisons with federal agencies, other districts and MDT divisions; providing technical consultation and department representation for national uniform highway methods and design specifications development; researching, developing, reviewing and recommending implementation strategies for new technology and advancements related to highway construction; and representing the District and MDT at public meetings, national meetings, media interviews, and with other governmental or private transportation interests.

Factor level Comparison:

The predominant work (District Construction Program management, 50%) involves providing managerial direction, planning, coordination, and program implementation responsibilities to a diverse range of technical and highly specialized professional engineering activities and projects (e.g. developing new approaches to policy and program issues such as determining contractor incentives; projecting impacts of changing national standards, construction project trends, industry practices, new materials, and equipment and construction processes; assessing contract administration, construction review, and contract claims strategies on contractors, costs and safety; researching, developing and

recommending new technology implementation into highway construction activities; assessing contract administration, claims management, engineering, materials and economic factors as they relate to providing direction and oversight of all District Construction operations throughout all phases of highway construction, etc.) and advanced management issues and applications including a broad range of managerial activities such as resolving technical construction problems within proposed contract plans, developing solutions to engineering deficiencies and contract administration problems, directing final review of plans, specifications, estimates, and constructability issues, and varying construction schedules and related dynamics. Managerial responsibilities include significant policy decisions and interpretations of conflicting federal, state and other regulations/requirements that impact strategic, short and long-term planning for program operations, as well as response to disputes related to contracts, claims and payments requiring analysis of construction processes, legal issues, materials standards, prefabrication processes, new equipment, environmental requirements and other factors. This position requires a high level of analysis to understand and respond effectively to complex engineering, contract and project dynamics affecting numerous public and private entities and overall project/program objectives. Level 7 is appropriate.

Benchmark Comparisons:

Comparable to the benchmark Engineering Manager, cc:005021, band 7. Both positions are responsible for managerial and professional duties in the field of engineering. Both serve as high level managers within their respective work units (Bureau level in the benchmark, and District level engineering in the subject position), and both direct and manage staff and projects, oversee development of policies and procedures, participate and coordinate with external organizations to establish effective communication and resolve complex engineering problems, develop consistent approaches and specifications, plan and implement large projects, and perform managerial supervision over diverse professional and technical work units. They are good comparisons overall.

Classification Analyst:

Name: Kristin Jacobson, CMS, LLC _____ Title: Consultant _____

Signature: _____ Date: 12/10/04 _____

Agency Approval:

Name: Jean Bond _____ Title: Chief, Employee Relations Bureau

Signature: _____ Date: _____